

REMARKS

The specification has been amended to include the addition of the required headings for the U.S. and the addition of paragraph numbers. The Substitute Specification also includes a clean copy of the claims as amended above. No other changes were made, and no new matter has been introduced.

Examination is requested based upon the amendments made via this Preliminary Amendment. The claims have been amended to eliminate multiple dependencies, improve readability and better conform to U.S. practice. Also, the Abstract is reproduced on a separate sheet and submitted herewith. No new matter is added.

Early consideration and allowance of pending claims 1 - 49, as amended, is respectfully requested.

Respectfully submitted,

Tomas Carlsson

By Robert Ballarini
Robert J. Ballarini
Registration No. 48,684
(215) 568-6400

Volpe and Koenig, P.C.
United Plaza, Suite 1600
30 South 17th Street
Philadelphia, PA 19103

RJB/pp
Enclosure

ABSTRACT

According to a first aspect there is a method for producing a protein-free product comprising free amino acids and short peptides, wherein raw protein materials are crushed and hydrolysed with endogenous enzymes and passed through different separation processes, including coagulation of protein residues, in order to obtain the desired product. The invention further comprises the product obtained and uses thereof. According to a second aspect, a protein product enriched with free amino acids and short peptides is produced, wherein the raw protein materials are ground and hydrolysed with endogenous enzymes, and wherein the hydrolysate undergoes various separation processes. The product obtained comprises proteins, short and long peptides, free amino acids and minerals and has a low fat content and salt content. According to a third aspect, hydrolysation of a protein-containing raw material and separation of amino acids/peptides is carried out, wherein the hydrolysation is effected by using the endogenous enzymes of the protein-containing raw material. The hydrolysate is passed through a membrane filter, wherein peptide/amino acids follow a permeate stream, whilst the active enzymes continuously break down any protein residues that are deposited on the membrane surface. The enzymes are passed together with retenate back to the hydrolysis. Furthermore, an amino acid and peptide product and an oil product are described and the use thereof is disclosed.